Listing of Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Claim 1 (currently amended): An isolated antibody capable of binding an extracellular Aspergillus fumigatus polypeptide selected from the group consisting of: isopropylmalate dehydrogenase B (SEQ ID NO: 36), CssI (SEQ ID NO: 1), hydrophobin (SEQ ID NO: 2), GAPDH-B (SEQ ID NO: 3), and catalase A (SEQ ID NO: 6).

Claim 2 (canceled)

Claim 3 (currently amended): The antibody of ~~any of the preceding claims~~ Claim 1, wherein the antibody is selected from the group consisting of: IgG, IgA, IgE, IgM and IgD, wherein IgG preferably is IgG1.

Claim 4 (currently amended): The antibody of ~~any of the preceding claims~~ Claim 1, wherein the antibody is capable of binding an intact Aspergillus fumigatus cell.

Claims 5 and 6 (canceled)

Claim 7 (currently amended): The antibody of ~~any of claims 1-6~~ Claim 1, wherein the antibody is polyclonal.

Claim 8 (currently amended): The antibody of ~~any of claims 1-6~~ Claim 1, wherein the antibody is monoclonal.

Claim 9 (currently amended): The antibody of claim 8, wherein the antibody is a chimeric, human or ~~humanised~~ humanized antibody.

Claim 10 (original): The antibody of claim 8, wherein the antibody is a human antibody.

Claim 11 (currently amended): The antibody of ~~any of the preceding claims~~ Claim 1, wherein the antibody is purified.

Claim 12 (currently amended): The antibody of ~~any of the preceding claims~~ Claim 1, wherein the antibody is further capable of binding a homologous polypeptide, wherein the homologous

polypeptide has a sequence identity of at least 39% ~~or more~~, such as 42% or more, ~~e.g.~~ 48% or more, ~~such as~~ 68% or more, ~~e.g.~~ 80% or more, ~~such as~~ or 90% or more, to a polypeptide selected from the group consisting of: isopropylmalate dehydrogenase B (SEQ ID NO: 36), CssI (SEQ ID NO: 1), hydrophobin (SEQ ID NO: 2), GAPDH-B (SEQ ID NO: 3), and catalase A (SEQ ID NO: 6).

Claim 13 (original): The antibody of claim 12, wherein said homologous polypeptide originates from:

- an Aspergillus species, such as Aspergillus fumigatus, Aspergillus nidulans, Aspergillus niger, or Aspergillus oryzea,
- Neurospora crassa,
- Saccharomyces cerevisiae,
- a Candida species such as Candida albicans,
- a Coccidioides species, such as Coccidioides posadasii, or Coccidioides immitis,
- a Cryptococcus species, such as Cryptococcus neoformans var. neoformans,
- a Fusarium species,
- a Pneumocystis species,
- a Penicillium species,

or

- Histoplasma capsulatum.

Claim 14 (original): The antibody of claim 13, wherein said homologous polypeptide originates from:

- an Aspergillus species, such as Aspergillus fumigatus, Aspergillus nidulans, Aspergillus niger or Aspergillus oryzea,
- Candida albicans,
- Coccidioides posadasii,

or

- Cryptococcus neoformans var. neoformans.

Claim 15 (original): The antibody of claim 14, wherein said homologous polypeptide originates from an Aspergillus species, such as Aspergillus fumigatus, Aspergillus nidulans, Aspergillus niger or Aspergillus oryzea.

Claim 16 (original): The antibody of claim 15, wherein said homologous polypeptide originates from Aspergillus fumigatus.

Claim 17 (original): The antibody of claim 16, wherein the said homologous polypeptide is the polypeptide of SEQ ID NO: 41.

Claims 18 - 20 (canceled)

Claim 21 (currently amended): The antibody of ~~any of the preceding claims~~ Claim 1, wherein the antibody is capable of binding a polypeptide selected from the group consisting of: isopropylmalate dehydrogenase B (SEQ ID NO: 36), CssI (SEQ ID NO: 1) and catalase A (SEQ ID NO: 6).

Claim 22 (currently amended): The antibody of ~~any of the preceding claims~~ Claim 1, wherein the antibody is capable of binding a polypeptide selected from the group consisting of: isopropylmalate dehydrogenase B (SEQ ID NO: 36) and CssI (SEQ ID NO: 1).

Claim 23 (currently amended): The antibody of ~~any of the preceding claims~~ Claim 1, wherein the antibody is capable of binding isopropylmalate dehydrogenase B (SEQ ID NO: 36).

Claim 24 (original): The antibody of claim 23, wherein the antibody is capable of binding an epitope which comprises one or more of the residues of a region of SEQ ID NO: 36 selected from the group consisting of: Ser67- Leu71, Ala74-Trp80, Ser191-Arg205, Leu268-Leu273, His292-Pro296, Glu355-Ile360, Asp193-Glu209, Asp193-Ala199, Ile15-Val19, Val75-Trp80, Pro11-Glu18 and the region defined by SEQ ID NO: 37, preferably an epitope which is entirely consisting of residues comprised within said region.

Claim 25 (currently amended): A pharmaceutical composition comprising an antibody as defined in ~~any of claims 1-24~~ Claim 1 and a pharmaceutically-acceptable carrier.

Claim 26 (canceled)

Claim 27 (currently amended): ~~Use of an antibody as defined in any of claims 1-24 or a composition as defined in claim 25 for the manufacture of a medicament for the~~ A method for the treatment or prevention of fungal ~~infections~~ infection, comprising administering to an individual a pharmaceutically-effective amount of an antibody as defined in claim 1.

Claim 28 (currently amended): ~~Use~~ The method of claim 27, wherein the fungal infection is an ~~medicament is a medicament for the treatment or prevention of~~ Aspergillus ~~infections~~ infection, preferably an Aspergillus fumigatus ~~infections~~ infection.

Claim 29 (currently amended): ~~Use~~ The method of claim 27, wherein the ~~medicament is a medicament for the treatment or prevention of a~~ fungal ~~disease~~ infection being treated or prevented is selected from the group consisting of: invasive aspergillosis, aspergilloma, and allergic aspergillosis, such as allergic bronchopulmonary aspergillosis.

Claim 30 (currently amended): A composition comprising one or more Aspergillus fumigatus polypeptides selected from the group consisting of:

polypeptides comprising SEQ ID NO: 36, fragments thereof and variants thereof,

fragments of SEQ ID NO: 1 of less than 259 amino-acid residues in length, such as less than 200, preferably less than 150, such as less than 100, ~~e.g.~~ such as less than 50, such as less than 25 amino-acid residues in length comprising one or more residues of the amino-acid sequences set forth in SEQ ID ~~NO~~ NOS: 7, 8, 17, 26, 28, 29 and/or 30 and variants of said fragments;

fragments of SEQ ID NO: 2 of less than 106 amino-acid residues in length, such as less than 75, preferably less than 50, such as less than 25 residues in length comprising one or more residues of the amino-acid sequences set forth in SEQ ID ~~NO~~ NOS: 9, 10, 18 and/or 19 and variants of said fragments;

polypeptides comprising SEQ ID NO: 3, fragments thereof and variants thereof, with the proviso that if the polypeptide is a fragment of SEQ ID NO: 3, that this fragment is not the fragment set forth in SEQ ID NO: 35;

fragments of SEQ ID NO: 4 of less than 437 amino-acid residues in length, such as less than 200, preferably less than 100, such as less than 75, ~~e.g.~~ such as less than 50, such as less than 25 amino-acid residues in length comprising one or more residues of the amino-acid sequences set forth in SEQ ID ~~NO~~ NOS: 13, 14, 23, 24 and/or 25 and variants of said fragments;

fragments of SEQ ID NO: 5 of less than 727 amino-acid residues in length, ~~e.g.~~ such as less than 400, such as less than 200, preferably less than 100, such as less than 75, ~~e.g.~~ such as less than 50, such as less than 25 amino-acid residues in length comprising one or more residues of the amino-acid sequences set forth in SEQ ID ~~NO~~ NOS: 15, 16 and/or 27 and variants of said fragments; and

fragments of SEQ ID NO: 6 of less than 748 amino-acid residues in length, ~~e.g.~~ such as less than 400, such as less than 200, preferably less than 100, such as less than 75, ~~e.g.~~ such as less than 50, such as less than 25 amino-acid residues in length comprising one or more residues of the amino-acid sequences set forth in SEQ ID NO: 34 and variants of said fragments.

Claim 31 (currently amended): An *Aspergillus fumigatus* polypeptide selected from the group consisting of:

polypeptides comprising SEQ ID NO: 36, fragments thereof and variants thereof,

fragments of SEQ ID NO: 1 of less than 259 amino-acid residues in length, such as less than 200, preferably less than 150, such as less than 100, ~~e.g.~~ such as less than 50, such as less than 25 amino-acid residues in length comprising one or more residues of the amino-acid sequences set forth in SEQ ID ~~NO~~ NOS: 7, 8, 17, 26, 28, 29 and/or 30 and variants of said fragments;

fragments of SEQ ID NO: 2 of less than 106 amino-acid residues in length, such as less than 75, preferably less than 50, such as less than 25 residues in length comprising one or more residues of the amino-acid sequences set forth in SEQ ID ~~NO~~ NOS: 9, 10, 18 and/or 19 and variants of said fragments;

polypeptides comprising SEQ ID NO: 3, fragments thereof and variants thereof, with the proviso that if the polypeptide is a fragment of SEQ ID NO: 3, that this fragment is not the fragment set forth in SEQ ID NO: 35;

fragments of SEQ ID NO: 4 of less than 437 amino-acid residues in length, such as less than 200, preferably less than 100, such as less than 75, ~~e.g.~~ such as less than 50, such as less than 25 amino-acid residues in length comprising one or more residues of the amino-acid sequences set forth in SEQ ID ~~NO~~ NOS: 13, 14, 23, 24 and/or 25 and variants of said fragments;

fragments of SEQ ID NO: 5 of less than 727 amino-acid residues in length, e.g. less than 400, such as less than 200, preferably less than 100, such as less than 75, ~~e.g.~~ such as less than 50, such as less than 25 amino-acid residues in length comprising one or more residues of the amino-acid sequences set forth in SEQ ID ~~NO~~ NOS:15, 16 and/or 27 and variants of said fragments; and

fragments of SEQ ID NO: 6 of less than 748 amino-acid residues in length, ~~e.g.~~ such as less than 400, such as less than 200, preferably less than 100, such as less than 75, e.g. less than 50, such as less than 25 amino-acid residues in length comprising one or more residues of the amino-acid sequences set forth in SEQ ID NO: 34 and variants of said fragments.

Claim 32 (original): The polypeptide of claim 31, wherein the polypeptide is a fragment comprising one or more residues of the amino-acid sequences set forth in SEQ ID NOs: 7-27 and/or 37, or a variant of said fragment.

Claim 33 (original): The polypeptide of claim 32, wherein the polypeptide is a fragment comprising one or more residues of the amino-acid sequences set forth in SEQ ID NOs: 7-16, or a variant of said fragment.

Claim 34 (original): The polypeptide of claim 32, wherein the polypeptide is a fragment comprising one or more residues of the amino-acid sequences set forth in SEQ ID NOs: 17-25 and/or SEQ ID NO: 14, or a variant of said fragment.

Claim 35 (original): The polypeptide of claim 32, wherein the polypeptide is a fragment comprising one or more residues of the amino-acid sequences set forth in SEQ ID NO: 18, 19, 26, 27, and/or 37, or a variant of said fragment.

Claim 36 (currently amended): A polynucleotide encoding a polypeptide as defined in ~~any of claims 31-35~~ Claim 31.

Claim 37 (original): An expression vector comprising a polynucleotide as defined in claim 36.

Claim 38 (currently amended): A host cell transformed or transfected with a polynucleotide as defined in claim 36 ~~and/or an expression vector as defined in claim 37~~.

Claim 39 (currently amended): A pharmaceutical composition comprising a polypeptide as defined in ~~any of claims 31-35 or a polynucleotide as defined in claim 36~~ Claim 31 and a pharmaceutically-acceptable carrier.

Claim 40 (canceled)

Claim 41 (currently amended): ~~Use of a polypeptide as defined in any of claims 31-35, a polynucleotide as defined in claim 36 for the manufacture of a medicament~~ A method for the ~~immunisation~~ immunization of a mammal against fungal infections, comprising the administration of a polypeptide as defined in claim 31.

Claim 42 (currently amended): The ~~use~~ method of claim 41, wherein said mammal is a human being.

Claim 43 (currently amended): A method for raising specific antibodies to a polypeptide selected from the group consisting of polypeptides set forth in SEQ ID NO: 1, 2, 3, 6 and 36 in a non-human mammal comprising the steps of:

a. providing a polypeptide selected from the group consisting of: isopropylmalate dehydrogenase B (SEQ ID NO:36), CssI (SEQ ID NO:1), hydrophobin (SEQ ID NO:2), GAPDH (SEQ ID NO:3), and catalase A (SEQ ID NO:6), or a polypeptide as defined in ~~any of claims 31-35~~ Claim 31, or a cell expressing any of these polypeptides,

b. introducing a composition comprising said polypeptide or said cell into said animal,

c. raising antibodies in said animal, and

d. isolating and optionally purifying the antibodies.

Claim 44 (original): The method of claim 43, wherein the raising of antibodies is done in a transgenic animal which is capable of producing human antibodies.

Claim 45 (currently amended): The method of claim 43 ~~or 44~~, wherein the polypeptide that is provided is isopropylmalate dehydrogenase B (SEQ ID NO: 36) or a fragment thereof, or a variant of said polypeptide.

Claim 46 (currently amended): The method of claim 43 ~~or 44~~, wherein the polypeptide that is provided is CssI (SEQ ID NO: 1) or a fragment thereof, or a variant of said polypeptide.

Claim 47 (currently amended): The method of claim 43 ~~or 44~~, wherein the polypeptide that is provided is hydrophobin (SEQ ID NO: 2) or a fragment thereof, or a variant of said polypeptide.

Claim 48 (currently amended): The method of claim 43 ~~or 44~~, wherein the polypeptide that is provided is GAPDH-B (SEQ ID NO: 3) or a fragment thereof, or a variant of said polypeptide.

Claim 49 (currently amended): The method of claim 43 ~~or 44~~, wherein the polypeptide that is provided is catalase A (SEQ ID NO: 6) or a fragment thereof, or a variant of said polypeptide.

Claim 50 (currently amended): A method for identifying a binding partner of a polypeptide selected from the group consisting of: isopropylmalate dehydrogenase B (SEQ ID NO:36), CssI (SEQ ID NO:1), hydrophobin (SEQ ID NO:2), GAPDH-B (SEQ ID NO: 3), enolase (SEQ ID NO: 4), catalase B (SEQ ID NO: 5) and catalase A (SEQ ID NO: 6), comprising the steps of :

a. providing a polypeptide as defined in ~~any of claims 31-35~~ Claim 31 or a polypeptide selected from the group consisting of: isopropylmalate dehydrogenase B (SEQ ID NO: 36), CssI (SEQ ID NO: 1), hydrophobin (SEQ ID NO: 2), GAPDH-B (SEQ ID NO: 3), catalase B (SEQ ID NO: 5), and catalase A (SEQ ID NO: 6),

b. contacting said polypeptide with a putative binding partner, and

c. determining whether said putative binding partner is capable of binding to said polypeptide.

Claim 51 (original): The method of claim 50, wherein the putative binding partner is a host-derived molecule.

Claim 52 (currently amended): The method of ~~any of claims 50-51~~ Claim 50, wherein said method is repeated for a plurality of putative binding partners.

Claim 53 (currently amended): A method for identifying a compound with antifungal activity comprising the steps of:

a. providing a ~~sensitised~~ sensitized cell which has a reduced level of a polypeptide selected from the group consisting of: SEQ ID NOs: 1, 2, 3, 5, 6, and 36 and

b. determining the sensitivity of said cell to a putative antifungal compound, for instance by a growth assay.

Claim 54 (currently amended): A method for identifying an inhibitor of an extracellular *Aspergillus* polypeptide selected from the group consisting of: isopropylmalate dehydrogenase B (SEQ ID NO: 36), CssI (SEQ ID NO: 1), GAPDH (SEQ ID NO: 3), and catalase A (SEQ ID NO: 6), comprising the steps of:

a. providing two cells which differ in the level of a polypeptide selected from the group consisting of: isopropylmalate dehydrogenase B (SEQ ID NO: 36), CssI (SEQ ID NO: 1), GAPDH (SEQ ID NO: 3), and catalase A (SEQ ID NO: 6),

b. determining the sensitivity of said cells to a putative inhibitor, for instance by a growth assay, and

c. determining whether said two cells are differently affected by the presence of said putative inhibitor.

Claim 55 (original): The method of claim 54, wherein the two cells differ in the copy number of said polypeptide.

Claim 56 (original): The method of claim 54, wherein the two cells differ in the activity of said polypeptide.

Claim 57 (currently amended): A method of diagnosing fungal infection, preferably Aspergillus fumigatus, ~~infection~~ comprising the steps of:

a. providing a sample from an individual,

b. contacting said sample with an indicator moiety capable of specifically ~~recognising~~ recognizing and binding a polypeptide selected from the group consisting of: isopropylmalate dehydrogenase B (SEQ ID NO:36), CssI (SEQ ID NO:1), hydrophobin (SEQ ID NO: 2), GAPDH-B (SEQ ID NO: 3), and catalase A (SEQ ID NO: 6), and

c. determining whether a signal has been generated by the indicator moiety.

Claim 58 (currently amended): The method of ~~the preceding claim~~ Claim 57, wherein said indicator moiety ~~is or~~ comprises an antibody, such as an antibody as defined in ~~any of claims 1-24~~ Claim 1.

Claim 59 (currently amended): A kit for the detection of fungal material, preferably intact fungal cells, most preferably intact Aspergillus fumigatus cells, in a biological sample comprising:

a. an indicator moiety capable of specifically ~~recognising~~ recognizing and binding a polypeptide selected from the group consisting of: isopropylmalate dehydrogenase B (SEQ ID NO: 36), CssI (SEQ ID NO:1), hydrophobin (SEQ ID NO: 2), GAPDH-B (SEQ ID NO: 3), and catalase A (SEQ ID NO: 6)~~, and~~ ;

b. ~~one or more of: a~~ at least one buffer for promoting binding of the indicator moiety to the fungal material;

c. at least one [[a]] reagent for generating a detectable signal; and

d. at least one written user instructions ~~to the user~~.

Claim 60 (currently amended): The kit of claim 59, wherein said indicator ~~is or~~ comprises an antibody, such as an antibody as defined in ~~any of claims 1-24~~ Claim 1.

Claim 61 (new): The antibody of claim 1, wherein the antibody is conjugated to a therapeutic moiety, such as a toxin or a fungicidal agent, or coupled to a detectable substance, such as a radioactive material.

Claim 62 (new): The method of claim 27, wherein the method is combined with other antifungal therapy.

Claim 63 (new): A host cell transformed or transfected with an expression vector as defined in Claim 37.

Claim 64 (new): A pharmaceutical composition comprising a polynucleotide as defined in Claim 36 and a pharmaceutically-acceptable carrier.

Claim 65 (new): A method for the immunization of a mammal against fungal infections, comprising the administration of a polynucleotide as defined in Claim 31.